

Serpentinization Sites – An Additional Criteria to Select Samples for Return to Earth

Summary by Bob Bruner

Lost-City Type Of Serpentinization

- Both A Geological Process And An Origin Of Life Theory
- Happened On Both Earth And Mars

General Formula:

- Olivine/Pyroxene + CO₂ + Water = Serpentine + Brucite + Magnetite + H₂ + CH₄
- Only Serpentine Detectable By CRISM On MRO

Proposal:

- Target Serpentine Deposits In Landing Area For Mars2020 And Cache For Return To Earth